Work Order ID 54160

December 1, 2009 3:04:04 PM



Page 1

Item ID: D117-762-041 Accept Setup Start Revision ID: A Stop Item Name: Replacement Skidtube Start Qty: 1.00 Start Date: 02/12/2009 **Cust Item ID:** Required Date: 16/12/2009 Req'd Qty: 1.00 Customer: Reference: Start Run **Tooling:** Approvals: **Process Plan:** Date: Stop SPC (Y/N): QC: Date: Date: Reject Sequence ID/ Operation Set Up/ Draw Draw Plan Accept Reject Insp. Work Center ID Description Number Rev. Code Qty Qty Number Stamp **Run Hours Draw Nbr Revision Nbr** D3582 Rev A 100 0.00 DOCUMENT CONTROL 0.00 Memo Photocopy bluefile & type labels per PPP D117-762-041 - CHG001 Document Control 0.00 110 Skidtubes 0.00 Skidtubes 1-Determine square end of tube and deburr Skidtubes 2-Drill #30 pilot holes using DT8678. 3- open holes to 5/16" 0.00 120

CNC Bend 1

CNC Delta 100 Bender

BENDING MACHINE - SKIDTUBES

Memo

0.00

Bend tube as per program D3582 on CNC Bender and Dwg D3582. Use 5/16" locator pin on buggy "A".

W/O:	•		V	VORK ORDER	CHANGES	•			•	100
DATE	STEP	PROC	EDURE CH	IANGE		Ву		Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No		PAR #:						•		
NCR:		lesolution:W		DER NON-CC					Date:	
DATE	STEP	Description of NC Section A	Initial Chief Eng		tion Section I escription of Eng		n &	Verification Section C	Approval Chief Eng	Approval QC Inspector
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December 1, 2009 3:04:04 PM

Item ID:

D117-762-041

Accept



Setup Start



Stop



Revision ID:

Item Name:

Replacement Skidtube

Start Date:

02/12/2009

Start Otv: 1.00

Required Date: 16/12/2009 Rea'd Otv: 1.00



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date: Tooling:

0.00

Run Date:

Stop



Date: SPC(Y/N):

Draw

Draw

Plan

Accept

Reject

Insp.

Work Center ID 130

Sequence ID/

Skidtubes

Skidtubes

Operation Description

Skidtubes

Set Up/ Run Hours

Number Rev.

Date:

Code

Qty

Reject Qty

Number Stamp

1-Cut Fwd end of the tube using DT8185 DD 9-12-2

2-Cut Aft end using DT8185

3-Deburr ends

4-Drill Aft Cap holes using DT8678 ***DO NOT OPEN AFT CAP HOLE*

5-Locate DT 8973 & Drill Ground wire hole on top of Tube.

6-Install 3/16 cleco in Ground wire hole .then d

140



Skidtubes Skidtubes

Skidtubes

Memo 1-Weld fwd cap D2964 per dwg D3582 and QSI 004

Batch: m 1/250 7 A/R AL ROD

2-Grind flush

BE 09/12/07

150

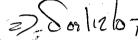


Quality Control

QC10- Inspect visual per QSI004- ground welds

Memo

0.00



W/O:		WORK ORDER CHANGES	,				1 1
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
09.12.04	1,20	Add missing will steps per Don proquette request. See Attackel.		· · · · ·		654204	Jonas

Part No: _	PAR #:	_ Fault Category:	NCR: Yes No DQA:	Date:	
	Resolution:	_ Disposition:	QA: N/C Closed:	_ Date:	

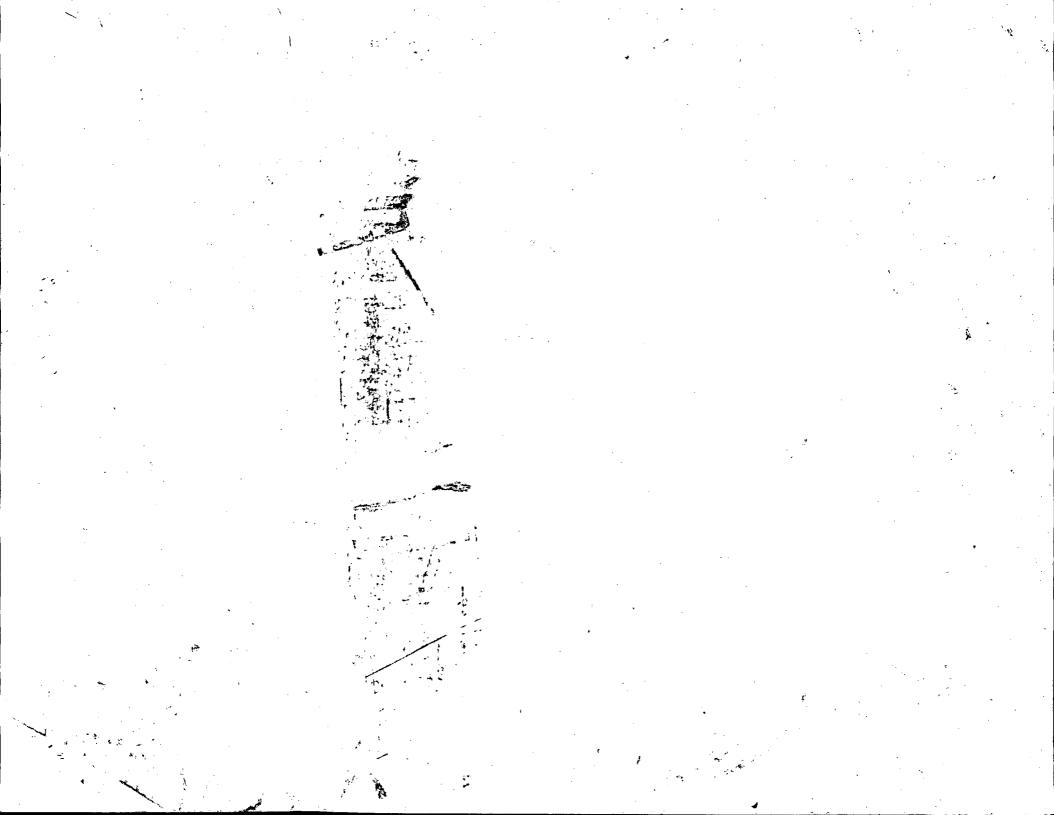
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5.47-		Description of NC		Corrective Action Section B		Verification		
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspector
69.1204	130	Using the EC 130 Jig (This so what was, being worked on prior). Holosme		c sink his necessary & Pill the 3/6) holes with melch percoscert is grinel the inside is out sick flush.	89 04/12/04			
65.(10)		3 on each sicle.	Sur	A/R M112507	9-12-4	folina	Esture	LS 12 04
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For seg 130; 189/12/03

- 1-Cut Fwd end of the tube using DT8185
- 2-Cut Aft end using DT8185
- 3-Deburr ends
- 4-Drill Aft Cap holes using DT8678 ***DO NOT OPEN AFT CAP HOLE***
- 5-Locate DT 8973 & Drill Ground wire hole on top of Tube.
- 6-Install 3/16 cleco in Ground wire hole, then drill all X-Bolt holes using 3/16" drill.
- 7-Drill pilot holes for wearplates using DT8974
- 8-Open wearplate holes to Ø19/64" (0.297") as per Dwg D3582.
- 9- open ground wear holes to 0.391" as per section B-B
- 10-Open Aft Cap holes using :209" drill.

11-Drill pilot holes for section D-D and E-E. Holes must be laid out by hand. Mark out Center line and make sure that 6.65 and 5.906 measurements are respected. Double check before drilling, do not open holes to finish size.

9-12-7



December 1, 2009 3:04:04 PM

Item ID:

D117-762-041

Accept

Setup Start

Stop



Revision ID:

Replacement Skidtube Item Name:

Start Date:

02/12/2009

Start Oty: 1.00

Required Date: 16/12/2009

Reg'd Oty: 1.00



Cust Item ID:

Customer:

1.1

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

QC:

Date: __

SPC (Y/N):

0.00

0.00

1.13

Date:

Stop

Start



Sequence ID/ Work Center ID

OC

Quality Control

Operation Description

QC5- Inspect part completeness to step on W/O

Memo

Memo

Set Up/ Run Hours Draw Number

2) 001/12/09

Plan Draw Code Rev.

Accept Qty

Reject Otv

Reject Insp. Number Stamp

170

HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

0.00

0.00

M9/12/8

Quality Control

QC3- Inspect Part Finish

Memo

0.00

0.00

180

W/O:			V	VORK ORDER CHANG	ES	· · ·			* ,	
DATE	STEP	PR	OCEDURE C	HANGE	E	Зу		Žty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No	•	PAR #:	Fault Ca	itegory:	_ NCR:	Yes N	No DQA:		_ Date: _	
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NCR:			WORK OR	DER NON-CONFORMA	ANCE (NCR)				, ,
DATE	STEP	Description of NC		Corrective Action Section			Verificat	ion	Approval	Approval
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December 1, 2009 3:04:04 PM

Required Date: 16/12/2009

Item ID: Revision ID: D117-762-041

Replacement Skidtube

Accept

Setup Start



Stop

Item Name: Start Date:

02/12/2009

Start Oty: 1.00 Reg'd Oty: 1.00

Cust Item ID:

Customer:

Draw

Number

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

Reject

Qty



Date:

SPC (Y/N):

Set Up/

Run Hours

Date:

Draw

Rev.

Plan

Code

Stop



Reject

Number

Insp.

Stamp

Sequence ID/ Work Center ID

190

Skidtubes .

Operation

Description

0.00

0.00

Skidtubes Skidtubes

1-Open X-Bolt holes to .750"(4Places) as per Dwg D3582, section B-B) χ 9/12/3 2-Counter Sink X-BOLT holes as per Dwg D3582

3-Deburr and blow out chips from inside of tube.

4-Bond web as per Dwg D3582 & QSI 015 A/R 241 Sike Flex Batch: MI 2395

Accept

Qty

200

Ouality Control

Memo

210

OC5- Inspect part completeness to step on W/O

OC10- Inspect visual per OSI004- ground welds

0.00

Memo

2) Sos lizico

QC

Quality Control

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W/O:			WO	RK ORDER CHANG	ES				•	, -
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NCR:			WORK ORDE	R NON-CONFORM	ANCE	(NCR)				
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Item ID: Revision ID:	D117-762-04	41		Accept				S	Setup Star		
Item Name:	Replacement S	Skidtube		•					Stop		
Start Date: Required Date	02/12/2009	Start Qty: 1.00 Req'd Qty: 1.00	LINATU MIR INDI Linatu mir indi		Cust Item II Customer:) :	· •	**	•		
Reference:							•	_	- 04	. 1600111011	8116 (8) (18) (88)
Approvals:	Process Pla	an:	Date:	Tooling:	Da	te:		ı	Run Star		
••	QC:		Date:	SPC (Y/N):	Da	te:	1		Stop		
Sequence ID/ Work Center 220 Powdercoat Powder Coating	•	Memo START TIN OVEN TEN) per QS1005 4.3-Alum 2148 ME_B*35 MPERATURE:_330 ME: 43 05	0.00	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230		QC3- Inspect Part Finis	4	0.00 Hlo	9/12/14		i 				

0.00

0.00

0.00

Install Wearplate & Ground Wire inserts as per Dwg D3582.

=7 \$409-17-14

Memo

Memo

HandFinishing

230

240

HandFinish

Hand Finishing

Quality Control

W/O:			V	VORK ORDER CHA	NGES					
DATE	STEP	PR	OCEDURE CH	IANGE	`	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No	:	PAR #:	Fault Ca	tegory:	NC	R: Yes I	No DQA:		_ Date: _	
	R	esolution:	Disposit	ion:	QA	: N/C Clo	sed:		Date: _	
NCR:			WORK OR	DER NON-CONFOR	RMANCI	E (NCR)			
DATE	STEP	Description of NC	C Corrective Action S				Verificat	ion	Approval	Approval
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Work Order ID 54160

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Item ID:

D117-762-041

Accept

Setup Start

Revision ID:

Item Name:

Replacement Skidtube

Cust Item ID:

Stop

Start Date:

02/12/2009 **Required Date: 16/12/2009**

Start Qty: 1.00 Req'd Qty: 1.00

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

0.00

Date:

Start Run



Date:

SPC (Y/N):

Date:_

Stop

Sequence ID/ Work Center ID

250

HandFinish Hand Finishing Operation Description

HandFinishing

Set Up/ **Run Hours** Draw Number

09/12/15

Draw Plan Rev. Code Accept Qty

Reject Qty

Reject Insp. Number Stamp

Memo

'1-Inspect for Foreign objects 2-Install Aft cap as per Dwg D3582, Detail "C"
A/R 241 Sika Flex Batch: 1/2345

Exp Date: 10/08
SEInstall Wearplates as per Dwg D3582,

Note:Install Bolt and wa

M117763

QC5- Inspect part completeness to step on W/O

0.00

260

Quality Control

Memo

0.00

270

Packaging

Packaging

Packaging

0.00

0.00

Identify and pack for shipping as per PPP D117-762-041

Location: PPP Rev:

Dart	Aeros	pace	Ltd
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W/0:5L	1160	WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No: 17-762-041 PAR #:	Fault Category:	NCR: Yes No DQA:	Date:
Resolution:	Disposition:	QA: N/C Closed:	Date:

NCR:		·	WORK ORDER NON-CONFORMANCE (NCR)										
		Description of NC		Corrective Action Section B	· ·-	Verification	Approval	Approval QC inspector					
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng						
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Work Order ID 54160

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Required Date: 16/12/2009



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Item ID:

D117-762-041

Accept

Setup Start

Stop



Revision ID: Α

Item Name:

Replacement Skidtube

Start Date:

02/12/2009

Start Oty: 1.00

Req'd Qty: 1.00



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

OC:

Date:

Date:

Tooling: SPC (Y/N):

0.00

0.00

Date: Date: Run

Stop

Start



Sequence ID/

Work Center ID

280

OC

Quality Control

Operation Description

OC21- Final Inspection - Work Order Release

Memo

Set Up/ **Run Hours** Draw Number

Draw Rev.

Plan Accept Qty Code

Reject Qty

Reject Insp. Number

Stamp

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W/O:			W	ORK ORDER CH	ANGES				, P	۶,
DATE	STEP	PROC	Approval Chief Eng / Prod Mgr	Approval QC Inspector						
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Part No	:	PAR #:	_ Fault Ca	tegory:	NC	R: Yes	No DQA		_ Date: _	
Resolution: Disposition: QA:					: N/C Clo	sed:		Date:		
NCR:		W	ORK OR	DER NON-CONFO	RMANCE	(NCR)			
DATE	STEP	Description of NC Section A	Initial Chief Eng	Corrective Action Action Descrip	Section B	Sign & Date	Verification Section C		Approval Chief Eng	Approval QC Inspector
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Picklist Print							i		100004	Page 1
December 1, 2009 3:04:10 PM										11
Work Order ID: 54160										· ·
Parent Item: D117-762-041RevA										
Parent Item Name: Replacement Skidtube						S	tart Date: 02/1	2/2009	Required Date:	16/12/2009
Comments:						5	Start Qty: 1.00		Required Qty:	1.00
Component Item ID/ Replacement Mfg/ Item Name Item ID Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
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D2971RevA1 Manufactur	red No		•	190	Each	39.0000	1.0000			
Cross Bolt Spacer							_			
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D3584-1RevA Web

Manufactured

B 54349

190

39

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W/O:			WORK ORDER CHANGES										
DATE	STEP	PRO	CEDURE CH	EDURE CHANGE By					Approval Chief Eng / Prod Mgr	Approval QC Inspector			
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Part No) :	PAR #:	Fault Ca	tegory:	NC	R: Yes I	No DQ	4 :	Date:				
R		esolution:	Disposit	tion:	QA	: N/C Cld	sed:		Date: _				
NCR:				DER NON-CON	FORMANCE	(NCR)	40.		,			
DATE	STEP	Description of NC		Corrective Action		6. 6	Verific	ation	Approval	Approval			
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December 1, 2009 3:04:10 PM

Work Order ID: 54160

Parent Item:

D117-762-041RevA

Parent Item Name: Replacement Skidtube

Manufactured



Start Date: 02/12/2009

Required Date: 16/12/2009

Start Oty 1 00

Required Oty: 1.00

Comments:						•		2	start Qty: 1.00		Required Qty: 1.0	U
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Roate Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date . Issued	Status
D2973RevA		Manufactured	No			190	Each	213.0000	2.0000			
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D3662-3RevA		Manufactured	No		14636	190	213 · Each	34.0000	1.0000	2	8609/12/	109

D3662-3RevA

Crossbolt Spacer

Warehouse Location	Lo	c Oty	Loc Code		
Main Warehouse				٠	
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	190	Each	24.0000	3.0000	

D3662-1RevA

Crossbolt Spacer

Warehouse Location	Loc Oty	Loc Code	
Main Warehouse			
ST	24	//	
39022	6	\$ > & & & 09/13	2/09
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W/O:			WORK ORDER CHANGES										
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Work Order ID: 54160

Parent Item:

D117-762-041RevA

Parent Item Name: Replacement Skidtube



Start Date: 02/12/2009

Required Date: 16/12/2009

Comments:				•				S	start Qty: 1.00		Required Qty: 1.	00
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
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ALS4-428-165		Purchased	No			240	Each	42.0000	2.0000			

Inserts

Loc Qty

Loc Code

1.0000

Manufactured

Warehouse Location

Main Warehouse

FP 6989

42 42 250 Each

3.0000

XZ JU 09-12-14

D2965RevB

Cap, 105 Skidtube

Loc Qty	Loc Code
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Picklist Print

December 1, 2009 3:04:11 PM

Work Order ID: 54160

Parent Item:

D117-762-041RevA

Parent Item Name: Replacement Skidtube

Comments:



Start Date: 02/12/2009

Required Date: 16/12/2009

Page 4

Start Qty: 1.00

Required Qty: 1.00

Comments:								1	Start Qty. 1.00		Required Qty. 1.	
Component Item ID/ Item Name	Replacement Item ID	Mag/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status 4
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D3508-9RevC		Manufactured	No			250	Each	3.0000	1.0000			
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				Main W	arehouse							
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W/O:			W	P o	j				
DATE	STEP	PRO	CEDURE CH	IANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No	:	PAR #:	Fault Car	tegory:	NCR: Yes	No DQA	•	_ Date: _	
_	R	esolution:	Disposit	ion:	QA: N/C CI	Date: _			
NCR:	,	V	VORK ORI	DER NON-CONFORMA	NCE (NCR	3)			а
DATE	STEP	Description of NC		Corrective Action Section		Verifica	ation	Approval	Approval
DAIL	J.L.	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section	n C	Chief Eng	QC Inspector
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Picklist Print

December 1, 2009 3:04:11 PM

Work Order ID: 54160

D117-762-041RevA

Parent Item:

Comments:

Parent Item Name: Replacement Skidtube





Start Date: 02/12/2009

Required Date: 16/12/2009

Page 5

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty.on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3558-9RevB		Manufactured	No			250	Each	15.0000	1.0000			

Warehouse	Loc	: Oty	Loc Code		
Location					
Main Warehouse					
ST		15			
60928		15			- X/ 11 09,15-17
	250	Each	13.0000	1.0000	

Manufactured D3558-11RevB

Gasket

Warehouse	Loc	<u>c Qty</u>	Loc Code		
Location					
Main Warehouse					
ST		13			
40399 42254		1 12			X1 74 69-12-14
. —	250	Each	10.0000	1.0000	, , , , , , , , , , , , , , , , , , ,

D3558-13RevB

Gasket

Manufactured

Warehouse Location	Loc Qty	Loc Code	
Main Warehouse			
ST	10	ı	-
40400	5	;	VI-51-6011/1X
42255	5		

Dart	Aeros	pace	Ltd
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W/O:			W	ORK ORDER CHANGI	ES				, . P. ,	•
DATE	STEP	PRO	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector			
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		'								
Part No	:	PAR #:	Fault Ca	legory:	NC	R: Yes	No DQ	A:	Date:	
	R	esolution:	Disposit	on:	_ QA	: N/C CI	osed:	8	Date:	
NCR:		V	VORK OR	DER NON-CONFORMA	NCE	(NCR)			
		Description of NC		on B		Verific	cation	Approval	Approval	
DATE	SIEP	STEP Description of NC Section A	Initial Chief Eng	Action Description Chief Eng		Sign & Date		on C	Chief Eng	QC Inspector
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Picklist Print

December 1, 2009 3:04:11 PM

Work Order ID: 54160

Parent Item: D11

D117-762-041RevA

Parent Item Name:

Replacement Skidtube

Comments:





Start Date: 02/12/2009

Required Date: 16/12/2009

Page 6

Start Oty: 1.00

Required Oty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bia Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3508-11RevC		Manufactured	No ·			250	Each	7.0000	1.0000			

Wearplate

Warehouse	Loc	: Oty	Loc Code		
Location					
Main Warehouse					
ST		7			
40398		2			X1 JU 09-12-K1
46880		5			
	250	Each	6.0000	1.0000	

D3508-13RevC

Manufactured No

! XEDINE (EEE 1116) SINK SEKK 1881 INSER WARE (11816) 1816 IN 811 ENERGY IN 1816

Wearplate

Warehouse	Loc	: Oty	Loc Code			
Location						
Main Warehouse						
ST		6				
42252		6				
: —	250	Each	20.0000	2.0000		

D3492-051RevC

Manufactured No



Plug Assembly

Warehouse Location	Loc Qty	Loc Code
Main Warehouse		T.
ST	20	
44633	20	

xz/109.12.14

XIM 09-12-14

Dart Aerospace L	_td
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W/O:		· · · · · · · · · · · · · · · · · · ·	W	ORK ORDER C	HANGES		**************************************			*	
DATE	STEP	PRO		Ву	Date	Qty Approval Chief Eng / Prod Mgr		Approval QC Inspector			
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		•			345 B					, ,	
Part No: PAR		PAR #:	Fault Category: NCR: Yes No DQA:						Date:		
	Re	esolution:	Dispositi	on:	Q <i>A</i>	A: N/C CI	osed:		Date:		
NCR:		\	WORK OR	DER NON-CONF	ORMANC	E (NCR	3)	H.,	, -		
DATE	STEP	Description of NC Section A	Initial Chief Eng	Corrective Action Action Desc	ription	ver			Approval Chief Eng	Approval QC Inspector	
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December 1, 2009 3:04:11 PM

Work Order ID: 54160

Parent Item:

D117-762-041RevA

Parent Item Name:

Replacement Skidtube

Comments:





Start Date: 02/12/2009

Required Date: 16/12/2009

Page 7

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3492-049RevC	,	Manufactured	No			250	Each	16.0000	2.0000			

Plug Assembly

 Warehouse
 Loc Oty
 Loc Code

 Location
 Incompany of the control of the control

X2 M/ 09-17-14

D3492-053RevC

Manufactured

No



Plug Assembly

Warehouse Loc Oty Loc Code

Location

Main Warehouse

ST 2
44063 2

XZM 09-12-11 4 M 09-12-11

4 el co

54641

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W/O:		-	WORK ORDER CHANGES									
DATE	STEP	PRO	OCEDURE CHA	ANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
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		•							*	,		
Part No	•	PAR #:	Fault Cate	egory:	NCF	R: Yes	No DQ	\ :	Date:			
	Re	esolution:	Disposition	on:	QA:	N/C CI	osed:		Date: _			
NCR:			WORK ORD	ER NON-CONFORM	IANCE	(NCR	1)					
DATE	STEP	Description of NC			ction B	Sign &	Verific	ation	Approval	Approval		
DATE	0.2.	Section A	Initial Chief Eng	Action Description Chief Eng	· · · · · · · · · · · · · · · · · · ·	Section C		Chief Eng	QC Inspector			
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December 1, 2009 3:04:11 PM

Work Order ID: 54160

Parent Item:

Comments:

D117-762-041RevA

Parent Item Name: Replacement Skidtube



Start Date: 02/12/2009

Required Date: 16/12/2009

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty_ tallssued	r	Date Issued	`Status
AN960JD10L		Purchased	No			250	Each	5,463.000	2.0000				
				v						•			

Washer

Warehouse	Loc	: Qty	Loc Code	
Location				
Main Warehouse				
ST		5463		400.
101291		16		
104885	•	153		
105793		236		
(109632)		280°		X2 41 09-12-14
110985		4778		
	250	Each	1,327.000 28.0000	
			(1 PR() (PR)	

AN3C4A

BOLT

Purchased

No

Warehouse Location Main Warehouse	<u>Locoty</u> <u>L</u> M113359	oc Code	x28 M09-12-14
ST	1327		
112314	13		
112720	12		
112724	3		
112829	44		
112991	39	1	
113121	216		
113226	1000		

Dart Aerospace	Ltd
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W/O:			WO	RK ORDER CHANG	GES				4	.
DATE	STEP	PR	OCEDURE CHAI	NGE	I	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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		1.44								
									(9) 4	
Part No	•	PAR #:	Fault Cate	jory:	_ NCR:	Yes	No DQ	A :	Date:	
	R	esolution:	Disposition	n:	QA: N	I/C Cld	sed:		Date:	
NCR:			WORK ORDE	ER NON-CONFORM	ANCE (NCR)			
DATE	OTED	Description of NC			tion B		Verific	ation	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng		Sign & Date	Secti		Chief Eng	QC Inspector
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Picklist Print

December 1, 2009 3:04:11 PM

Work Order ID: 54160

Parent Item:

D117-762-041RevA

Comments:

Parent Item Name: Replacement Skidtube



Start Date: 02/12/2009

Required Date: 16/12/2009

Page 9

Start Qty: 1.00

Required Qty: 1.00

Component Item 🕡	Replacement Item ID	Mfg/ Purch	Bin Primary Item Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	. •	Date Issued	Status
AN3C5A		Purchased	No		250	Each	1,011.000	2.0000			· · · · · · · · · · · · · · · · · · ·	
] 											

Bolt

Warehouse	Loc C	<u>)ty</u>	Loc Code		
Location					
Main Warehouse					
ST	1	011			
111424		8			
111707		69			
112314		1			
(112641)		333			X2.41 09-12-14
113121		300			<u> </u>
113149		300			<u></u>
	250	Each	854.0000	2.0000	

AN960JD416L

Purchased

No

|--|--|--|

Washer

Warehouse	Loc Qty	Loc Code	
Location			
Main Warehouse			
ST	854		
107008	54		
108138	4		
108583	42		x2 2 09-12-14
110153	354		
112492	400	İ	
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Dart Aeı	rospace	e Ltd								• •		
W/O:				WORK ORDER CHANGES								
DATE	STEP		Р	ROCEDURE CHANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
	• *											
		<u>.</u>	<u> </u>				···	, :	-			
				•								
Part No	:		PAR #:	Fault Category:	NCR	: Yes	No DQ	A:	_ Date:			
Resolution:		າ:	Disposition:	QA:	Date:							
NCR:				WORK ORDER NON-CONFORMANCE (NCR)								

	WORK ORDER NON-CONFORMANCE (NCR)								
	Description of NC		Corrective Action Section B			Approval	Approval		
STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspecto		
					!				
	STEP	STEP Description of NC	STEP Description of NC Section A Initial	STEP Description of NC Section A Initial Action Description	STEP Description of NC Section A Initial Action Description Sign &	STEP Description of NC Section A Initial Action Description Sign & Section C	STEP Description of NC Section A Description A Description A Description A Description Section B Section C		

Picklist Print

Page 10

December 1, 2009 3:04:11 PM

Work Order ID: 54160

Parent Item:

D117-762-041RevA

Parent Item Name: Replacement Skidtube

Comments:



Start Date: 02/12/2009

Required Date: 16/12/2009

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Floute Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date ···· Issued	Status
AN960C10L		Purchased	No			250	Each	1,844.000	28.0000			
				Warehou	<u>ise</u>	Loc	<u>Oty</u>	Loc Code				
				Loca	tion		•					
				OFFSHO	RE							

OFFSHORE		
FG	100	
103585	100	

Main Warehouse

ST

1744 112116 536 112612 342 866 112933

121.0000 2.0000

AN4-4A

Bolt

Purchased

No

250

Each

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
ST	121	
101291	3	
106918	1	
108138	60	
111295	57	

x 2 h 08-12-14

128 1109-12-11

Dart	Aeros	pace	Ltd

W/O:		WORK ORDER CHANGES									
DATE	STEP	PROG	· · · · · · · · · · · · · · · · · · ·	Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector				
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Part No	:	PAR #:	_ Fault Cate	gory:	NCR: Yes	No DQA:	Date:				
Resolution:											
NCR:		W	ORK ORDE	R NON-CONFORMA	NCE (NCF	2)					
DATE	STEP	Description of NC			on B	Verification	Approval	Approval			
DAIL	OIL.	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector			
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December 1, 2009 3:04:11 PM

Work Order ID: 54160

Parent Item:

D117-762-041RevA

Parent Item Name:

Replacement Skidtube

Comments:



Start Date: 02/12/2009

Required Date: 16/12/2009

Start Oty: 1.00

Required Oty: 1.00

NAS1611-012	 				Seq ID	Measure	Hand	Qty To Pick	Issued	Issued	
0-ring	Purchased	No			250	Each	62.0000	6.0000			
O-Kii VO			<u>Warehous</u> Locati	_	Loc (<u>Oty</u>	Loc Code				

NAS1611-015

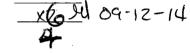
Purchased No

Purchased

ST

62 62 250

Each 22.0000 2.0000



O-RING

Warehouse Location

Main Warehouse

ST

No

(107178

22 22

Each

250

Loc Qty

2.0000 69.0000

Loc Code

TU 09-12-14

.NAS1611-016

O-RING

Location Main Warehouse

Warehouse

ST

Loc Otv

69

19 50 Loc Code

x2M09-12-101

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W/O:			WO	RK ORDER CHANG	ES			
DATE	STEP	PRO	PROCEDURE CHANGE					Approval QC Inspector
								31.7
Part No	:	PAR #:	Fault Cate	Jory:	_ NCR: Yes	No DQA: _	Date: _	
	R	esolution:	olution: Disposition:				Date: _	
NCR:		V	VORK ORDE	R NON-CONFORMA	ANCE (NCF	R)		
DATE STEP		Description of NC	Describition of NC		e Action Section B Verif			Approval
DAIL	SIEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign 8 Date	Section C		QC Inspector
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PARTS LIST FOR D3582-041 SKIDTUBE ASSEMBLY

Qty	Part Number	Description
Х	D3582-041	SKIDTUBE ASSEMBLY
1	D2962-150	EXTRUSION
1	D2964	CAP
1	D2965	CAP
1	D2971	CROSS BOLT SPACER
2	D2973	CROSS BOLT SPACER
2	D3492-049	PLUG ASSEMBLY
2	D3492-051	PLUG ASSEMBLY
6	D3492-053	PLUG ASSEMBLY
1	D3508-3	WEARPLATE
1	D3508-9	WEARPLATE
1	D3508-11	WEARPLATE
1	D3508-13	WEARPLATE
1	D3558-3	GASKET
1	D3558-9	GASKET
1	D3558-11	GASKET
1	D3558-13	GASKET
1	D3584-1	WEB
3	D3662-1	CROSS BOLT SPACER
1	D3662-3	CROSS BOLT SPACER
36	AELS-1032-130	INSERT
2	ALS7-428-165	INSERT
28	AN3C4A	BOLT
2	AN3-5A	BOLT
2	AN4-4A	BOLT
28	AN960C10L	WASHER
2	AN960JD10L	WASHER
2	AN960JD416L	WASHER

GENERAL NOTES:

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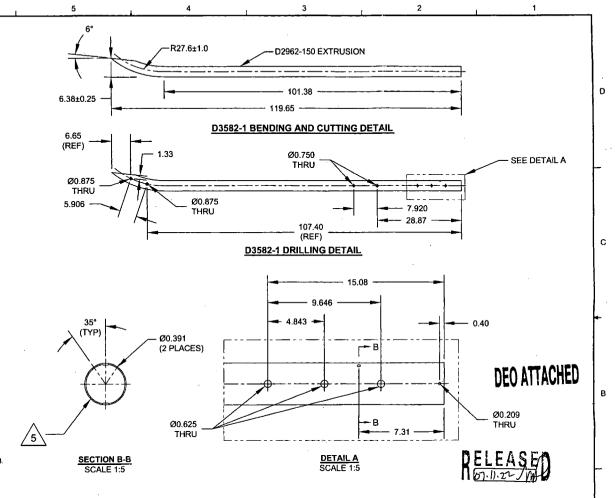
- 1) ALL DIMENSIONS ARE IN INCHES
- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) WELDING TO BE DONE PER DART QSI 004.
- INSERT D3584-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015 AFTER BENDING.
- USE DART DRILL TEMPLATE DT8900 TO LOCATE AND DRILL ØD.297 HOLES (36 PLACES) FOR WEARSHOE INSERTS. INSTALL AELS-1032-130 PER SECTION G-G (36
- PLACES) AFTER FINISH. SEAL WEARPLATE BOLTS WITH SIKAFLEX-241/-291. DO NOT INSTALL AN3C4A BOLTS AND AN960C10L WASHERS IN INDICATED
- LOCATIONS.

8

- 7) FINISH:
 - A) CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING D3584-1 WEB.

 B) POWDER COAT ASSEMBLY GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3.

 - C) ANTI-SKID PAINT AS INDICATED TO 1.00 ABOVE CENTER LINE PER DART QSI



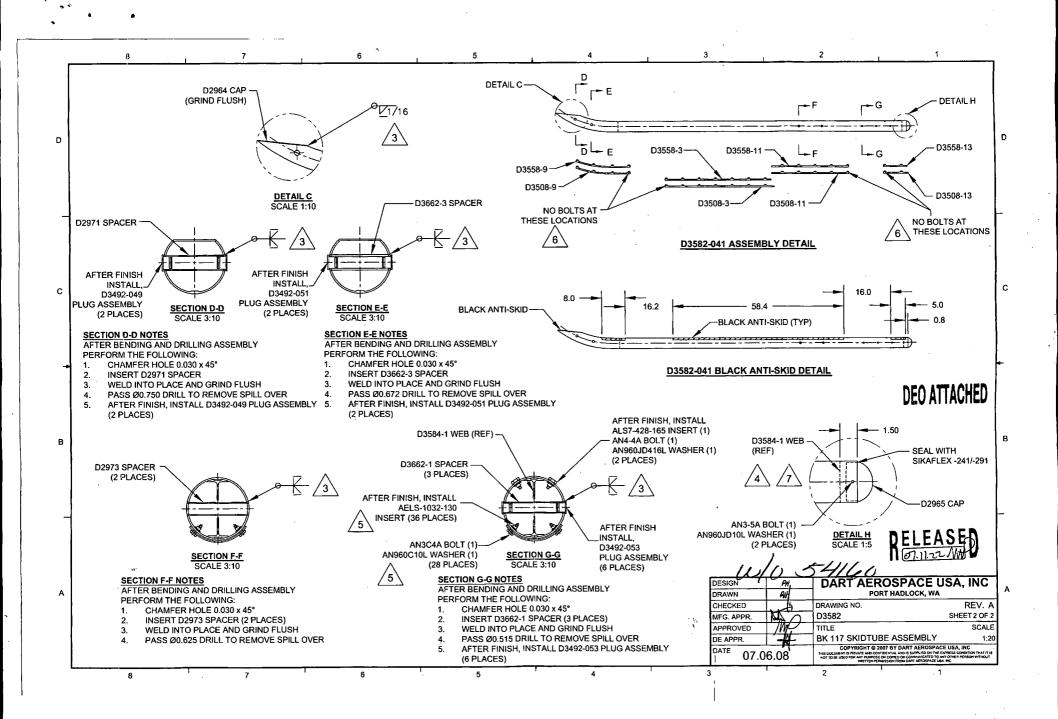
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A NEW ISSUE 07.06.08 DESCRIPTION BY DATE REV. DART AEROSPACE USA, INC DESIGN PORT HADLOCK, WA DRAWN CHECKED DRAWING NO. REV. A D3582 SHEET 1 OF 2 MFG. APPR. APPROVED TITLE SCALE **BK 117 SKIDTUBE ASSEMBLY** DE APPR 1:20 COPYRIGHT © 2007 BY DART AEROSPACE USA, INC. DATE 07.06.08

WORK CRA R NO. 5 4/60 196 09-12-1

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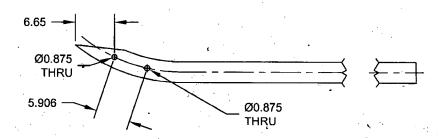
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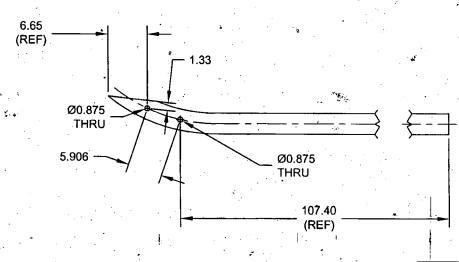
W/0 54160

FOR EASE OF MANUFACTURE AND TO ENSURE THE FIT OF BRISTOL WIRESTRIKE SKID GEAR DEFLECTOR: UPDATE DIMENSIONING OF 2 FWD HOLES ON SHEET 1 AS SHOWN

IS:



WAS:



RELEASED

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AWS D17.1.2001 QUALIFICATION TEST RECORD

Name: Darchay Ellistt Job number: 54161				
		Part number: NO TED 041 Description: NO TED 041 Welding Process: Tig[/] Mig[] Base materiel: Alamana Current: AC[/] DC[]		
TEST	Γ REQUIREMENTS AND RESULTS			
Visual:	pass[/] fail[]			
Penetration:	$pass[\checkmark] fail[]$			
	, , , , , , , , , , , , , , , , , , , ,			
<u>UNACCEPTABLE</u>				
Cracks:	pass[] fail[]			
Undercut:	pass[/] fail[]			
Pin holes:	pass[/] fail[]			
Overlap (cold lap)	pass[v] fail[]			
Porosity (surface):	pass[// fail[]			
Coloration:	pass[~] fail[]			
$\ell \sim 1$				
Qualifier (c)	Date of Test Coupon C9/12/15			
0 // //	/ ₄ ,			
Welder Landays Hu	Date of Test Coupon 09/12/10			

The above named individual is qualified in accordance with AWS D17.1.2001 to weld